

Update on the SPORE Evaluation Report

NCAB/BSA Working Group

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SPORE Evaluations Over the Years

- **2003 Report of the P30/P50 Ad Hoc Working Group**

- **2010 NCAB Ad Hoc Working Group**

- **2011-2014 Science and Technology Policy Institute (STPI)**
 - To determine whether the SPORE Program is meeting its goals based upon the specific requirements in the current guidelines

- **2013-2014 Clinical and Translational Research Advisory Committee (CTAC) Working Group**
 - To study the findings of STPI and determine the value of the SPORE program to the NCI
 - To provide a recommendation for the re-issuance of a Program Announcement

SPORE Evaluations Over the Years

- **2014-2016 BSA/NCAB SPORE Evaluation Group**
 - **To answer the questions:**
 - **Is there continued value of the SPORE program given the decreased NCI budget?**
 - **Do we need a program that emphasizes translational research 23 years after the inception of the SPOREs? Isn't this the "order of the day?"**
 - **What other mechanisms are doing translational research?**
 - **Should the program continue or not?**

Recommendation Categories

1. For the NCI (concerning translational research)

- Development of a more integrated translational research effort that spans multiple NCI and extramural programs

2. For the SPORE Program itself

- Development and implementation of a “SPORE Successor” Program

• Discussions:

- At the Joint Meeting of the NCAB/BSA on December 6
- With all the currently funded SPORE PIs on a phone call and further details and opinions provided in emails from December 12 to present
- With the Associate Directors of DCTD on January 25

For the NCI

- Ensure that funding goes to the highest quality science and that projects are adequately resourced.
- Maintain or increase current level of NCI funding for patient-centered translational research.
- Develop incentives that will encourage collaboration with other academic institutions and industry.
- Increase integration, leveraging and interfacing of NCI currently funded translational programs with industry, advocacy groups and other funding agencies.
- Create a standing NCI Translational Research Strategy Subcommittee aligned with the NCI Board of Scientific Advisors (BSA).
- **Continue the SPORE program as a “successor” program—much translational research still needs to be done.**

For the SPORE Program

- Re-brand the SPORE program as the TREX program.
- Involvement of research advocates with a collective patient perspective should continue. ✓
- Encourage impactful research projects that bring investigators from multiple institutions together. ✓
- Continue to address important questions within organ sites as well as “cross cancer” initiatives that focus on targeting commonly mutated genes or pathways. ✓
- Continue the Career Enhancement Program to support new translational PIs. ✓

✓ = already doing this

For the SPOR Program (continued)

- Each research project should continue to include a clinical PI and other disciplinary-based PIs. ✓
- Eliminate the requirement for a minimum number of projects within each grant to facilitate development of both small focused projects and large-scale team-based projects.
- At least one—but not all—translational research projects must incorporate a defined clinical endpoint.
- Enhance the coordination of the program with NCI-designated Cancer Centers but retain full autonomy to fulfill the Program's stated goals. ✓
- Develop and adopt community consensus standards for clinical and biological metadata, including data security and encourage exchange of data.

✓ = already doing this

For the SPOR Program (continued)

- Develop a program-wide consent process that would inform patients about:
 - Risks and rewards of participating in the program
 - Possibility that some data may be made available to private sector collaborator that would enable use of information in research that was not envisioned at the time of consent.
- Contribute to the development of a functional data commons that can be readily accessed by research and clinical PIs and that can contribute to the development of clinical decision support tools.
- Encourage and support laboratory models of important aspects of cancer, e.g., PDXs, organoids, paired germline samples, engineered tissues. ✓
- Encourage translational research COREs that fill broad institutional infrastructure gaps such as tissue acquisition, informatics and developing technologies. ✓

✓ = already doing this

Other issues that arose at the NCAB/BSA discussion

- Should EPPS* projects be required or is the current incentive enough?
- One more thing: Total vs. Direct Cost Cap? (Discussed in-house)
 - The NIH is now requiring all FOAs to use direct cost rather than total cost unless there is a specific need to do otherwise (this would require an exception.)

***EPPS= Early Detection, Prevention, Population Science**

Eliminate the Requirement for a Minimum Number of Projects

We now require 4 translational projects with a defined human endpoint

- **Pros:**

- Would give flexibility to design translational research for small focused projects or large team-based projects

- **Cons:**

- Would need to use a separate mechanism (and review) for a 1-project grant
- Would abolish the multi-disciplinary spirit (breadth) of the program, which is important in translating discoveries and servicing unmet needs
- Possibility of PIs taking best 2 projects and adding additional funding rather than increasing the scope, magnitude, and consequence of the studies
- **Consensus:** Funded PIs overwhelmingly **prefer 3 as the minimum number**. Less than that would lead, over a short time, to establishing 2 as the *de facto* number, lessening the translational impact of the program. New SPORE applicants who were questioned prefer 3 as the minimum.

Eliminate the Requirement for a Minimum Number of Projects

- **Proposed:**

- Establish **3** scientific projects as the minimum number for submission (although more could be proposed)
- Maintain the same overall budget
- For competing renewal applications (type 2s):
 - Option to select 2 successful projects from the prior funding period and expand (additional scope, expertise, institutions, clinical studies) with only 2 projects
 - Renewal applications could continue to apply with 3 or more projects.

Incorporation of a defined clinical endpoint in at least one project

- **Comments:**
 - A clinical endpoint was never required for any SPORE project. Each project must have a human endpoint which could involve the use of human specimens to elucidate aspects of the biology of the disease, including development of biomarkers.
 - Currently, all funded SPOREs have a clinical trial proposed for at least one project.
- **Pros:** A clinical endpoint would strengthen the translational aspect of the program.
- **Cons:** Would preclude a SPORE that has high powered epidemiology studies, but no clinical trials. (But a clinical endpoint could be structured so that a human study is acceptable.)
- **Consensus:** Most SPORE PIs like the idea of requiring a clinical trial in at least one project. Everyone wanted to retain a human endpoint for all projects; a non-translational project was not considered acceptable since there are many other mechanisms for this.

Incorporation of a defined clinical endpoint in at least one project

- **Proposed:**
 - **A clinical trial (or population study) will be required for at least one scientific project in each SPORE**
 - **In type 2 SPOREs with only 2 projects, a clinical trial/study will be required in each of the expanded projects**

Functional Data Commons

- **Recommendation:** The Program should contribute to the development of a functional data commons that will organize functional data throughout the research community in ways that allow it to be accessed by investigators to facilitate causal relationships and contribute to the development of clinical decision support tools
- **Comment:** The Office of Data Sharing is now being set up
- **Proposed: (after discussions with CBIIT)**
 - SPORE scientists should participate (virtual workshop?) in asking what important functional data needs to be shared and help define a pilot of a functional data commons
 - If the SPORE has a project(s) that could contribute data, it should contribute data
 - Sharing should take place at the time of publication
 - Should be addressed in the SPORE Administrative CORE with a person named for data-sharing activities and more fully in the Data Sharing Plan
- **Note:** SPOREs already contribute via the Genomic Data Sharing Policy for genomic data

Re-branding the SPORE Program (as TREX)

- **Pros:**

- The name SPORE does not contain the term Translational Research
- According to Dr. Dang: old SPORE has “baggage”(?) so we need a new start

- **Cons:**

- TREX is a name with an unfortunate connotation (T-Rex) .
- The changes suggested by the WG are of smaller magnitude than those that were put in place over the years—with no name change
- The SPORE brand is known by everyone including Advocates and Congressional Committees
- Everyone will still call the grants SPOREs

- **Consensus:** No one wants to change the name.

Re-branding the SPORE Program (as TREX)

- **Proposed:**
 - Keep the well-known name **SPORE**, or
 - SPORE-II
 - T-SPORE

Additional recommendations:

- **Develop a program-wide consent process that would inform patients about:**
 - **Risks and rewards of participating in the program**
 - **Possibility that some data may be made available to private sector collaborator that would enable use of information in research that was not envisioned at the time of consent**
 - **Comment:** Will be incorporated into the Program Announcement

Should an EPPS project be required?

■ **Comments:**

- This discussion has taken place over the past 20 years. Initially, it was required for only the 4 major human cancers, but later additional organ sites required it and then later some were dropped.
- In January 2015, a new PAR went into effect that no longer mandated an EPPS project but incentivized funded SPOREs with up to \$200K total cost for one or more EPPS project. This was a decision arrived at (on 3/4/14) by the Directors of DCTD, DCP, and DCCPS. For FY16: **3 out of 8 funded SPOREs received additional funding**
- **Pros:** “Unless mandated, EPPS projects would not be proposed” (according to the BSA members.)
- **Cons:** Mandated EPPS projects create a non-level playing field; some organ sites are more amenable to this type of project and not all institutions have the appropriate expertise
- **Consensus:** Everyone likes the current strategy, encouraged (with an incentive) but not mandated, where the strongest projects can be submitted.
- **Proposed:** **Keep the current approach. It’s working well.**

Comments?

Suggestions?

Discussion?



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